ASKO

Service manual

Type: WM33A WM44A

Product:	Front-loading washing machine	**Overview of new/modified types of washing machines introduced to the market in 2001**	Group:	21
Date:	11.1.2002			
Reference:	N-Å Carlsson			Page: 1(7)

ASKO Cylinda's range of washing machines was modified during the autumn of 2001. A brief overview of the modifications which were carried out follows below.

Further information is given in the product data given below.

New type	Replaces old type	Main differences	Product info
WM33A	WM33	Programmer no longer fitted, replaced by rotary switch and electronic control card. E2 no longer fitted, new programs. New panel graphic.	A
WM44A	WM44	Programmer no longer fitted, replaced by rotary switch and electronic control card. E2 no longer fitted, new programs. New panel graphic.	A
WM50	NEW	Electronic control with knob and 7-segment LED display. 11 programs.	B
WM55A	WM55	New control card. New menu logic. New programs. Among other things, 1-24 hour delayed start. New panel graphic. Shop program indicated on the display.	C
WM56	NEW	Electronic control with buttons and display. 8 programs. Shop program indicated on display.	D
WM66A	WM66	See WM55A.	C

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Service manual

Type: WM33A WM44A

Produkt:	Front-loading washing machine	**Modified washing machine**	Group: 21
Date:	11.1.2002	**WM33A/WM44A**	**A**
Reference:	N-Å Carlsson		Page: 2(7)

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- Handling
- Options
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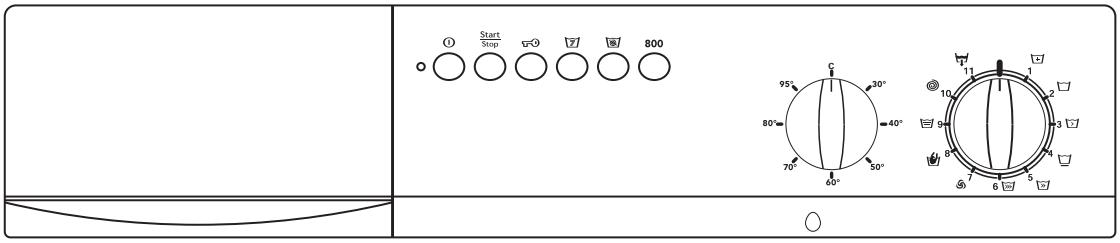
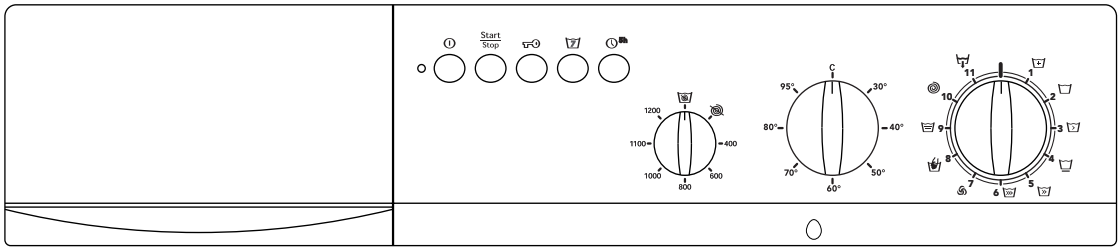
- Consumption values
- Loops on control card
- Wiring diagram, Art.no. 8064368

This service information is intended as a supplement to the W600-series service manual.

Example of WM33A Panel



Example of WM44A Panel



General

Mechanically the machine is based on WM33/44 (W600/W620), except for the panel and control unit. For more information, see the service manual for the W600 series.

The machine is available with various options for pushbuttons, which may vary from market to market. See also loops on the control card.

Handling

1. Sort the washing.
2. Turn on the main switch, ⏻, open the washer door, 🚪 and load the textiles.
3. Putting in the detergent and conditioner.
4. Select program with the program selector knob.
5. Set the desired temperature with the temperature knob and press the appropriate option buttons.
6. Close the door and start the program by pressing the Start/Stop-button. It will take a few seconds before you hear the machine starting.

To interrupt the programme, press the Start/Stop-button for three seconds. If any water remains in the machine, run either the Drain or the Spin program. Any water will then be pumped out.

7.The programme is complete when the door can be opened with the 🚪 button.
8. When washing is finished, turn off the main power switch, ⏻, and close the washer door.

Options (all options is not available on all machines):

800 Spin 800 revolutions/minute.
The normal spin speed is 1000, 1100 or 1200 revolutions/minute (long spin).
By pressing the **800** button, you can select a lower spin speed of 800 revolutions/minute (short spin).

No spin/ no drain
By pressing the button, the programme will be executed without a spin and will be completed without draining.

Super rinse
Super rinse adds extra rinses to the washing programs, see the table at page 4.

5h Delayed start
By pressing the 5h button, the machine will start 5 hours after you start the washing program.

Available programs, 5 rinses

Programme information						Programme content						Other
Programme No.	Programme	Max. quantity	Temperature °C (A)	Max. spin speed rev/min	Pre-wash	Main wash	Spin	Rinse (B)	Spin	Rinse (B)	Spin	
1	Heavy wash	●	C,30-95	1100	■	■	◎	▦▦▦	◎	▦▦	◎	
2	Normal wash	●	C,30-95	1100		■	◎	▦▦▦	◎	▦▦	◎	
3	Light wash	●	C,30-95	1100		■	◎	▦▦▦	◎	▦▦	◎	Shorter main wash than for Normal wash.
4	Synthetic wash	◒	C,30-95	800		■		▦▦▦			◎	
5	Quick wash	●	C,30-95	1100		■		▦▦▦			◎	
6	Super quick wash	◒	C,30-95	1100		■		▦▦			◎	
7	Wool wash (C)	◒	C,30-40	800		■		▦▦▦			◎	
8	Hand wash (C)	◒	C,30-40	800		■		▦▦▦			◎	Slightly more gentle than Wool wash.
9	Rinse programme	●		1100				▦			◎	
10	Spin	●		1100							◎	
11	Drain	●	Pumping only									

WM3344-5

● 1/1 (6,0 kg)
◒ 1/2 (3,0 kg)
◒ 1/3 (2,0 kg)

■ Wash
▦ Rinse

◎ Short spin (max. 800 rev/min)
◎ Long spin

WM33: Short spin (always 800 r/min)

((A) C in the display denotes the temperature of the incoming water.
B) With the Super Rinse On option:
For programmes 1-3, two extra rinses will be included before the final ordinary rinse.
(C) Delicate wash – high water level.

Available programs, 3 rinses

Programme information						Programme content								Other
Programme No.	Programme	Max. quantity	Temperature °C (A)	Max. spin speed rev/min	Pre-wash	Main wash	Spin	Rinse (B)	Spin	Rinse (B)	Spin	Rinse (B)	Spin	
1	Heavy wash	●	C,30-95	1100	■	■	◎	▦	◎	▦	◎	▦	◎	
2	Normal wash	●	C,30-95	1100		■	◎	▦	◎	▦	◎	▦	◎	
3	Light wash	●	C,30-95	1100		■	◎	▦	◎	▦	◎	▦	◎	Shorter main wash than for Normal wash.
4	Synthetic wash	◒	C,30-95	800		■		▦		▦		▦	◎	
5	Quick wash	●	C,30-95	1100		■		▦		▦		▦	◎	
6	Super quick wash	◒	C,30-95	1100		■		▦		▦			◎	
7	Wool wash (C)	◒	C,30-40	800		■		▦		▦		▦	◎	
8	Hand wash (C)	◒	C,30-40	800		■		▦		▦		▦	◎	Slightly more gentle than Wool wash.
9	Rinse programme	●		1100				▦					◎	
10	Spin	●		1100									◎	
11	Drain	●	Pumping only											

WM3344-3

● 1/1 (6,0 kg)
◒ 1/2 (3,0 kg)
◒ 1/3 (2,0 kg)

■ Wash
▦ Rinse

◎ Short spin (max. 800 rev/min)
◎ Long spin

WM33: Short spin (always 800 r/min)

(A) C in the display denotes the temperature of the incoming water.
(B) With the Super Rinse On option:
For programmes 1-3, four extra rinses will be included, and one spin will be omitted.
For programmes 4-8: two extra rinses will be included before the final ordinary rinse.
(C) Delicate wash – high water level.

Consumption values

WM 33A/ 44A

The following conditions apply for the consumption values indicated below:
Temperature of incoming water: 15ºC. Element power: 2000 W. Options: None

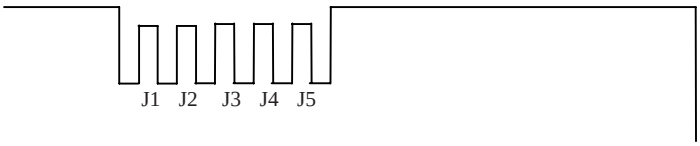
PROGRAM	MATERIAL/WASHING TEMPERATURE(1)	LOAD (2)	WATER CONSUMPTION (approx. litre)	POWER CONSUMPTION (approx. kWh)	PROGRAM TIME (approx. minutes)
Heavy wash	Cotton, linen, 60°C	5,0 kg	**5 rinses** 62 **3 rinses** 52	1,20 1,20	140 135
Normal wash	Cotton, linen, 60°C	5,0 kg	59 49	0,95 0,95	125 120
Light wash	Cotton, linen, 60°C	5,0 kg	59 49	0,90 0,90	85 80
Synthetic wash	Polyester, cotton / polyester, nylon, 40 C	3,0 kg	28	0,35	65
Quick wash	Cotton, linen, 60°C	5,0 kg	35	0,90	58
Super quick wash	Polyester, cotton / polyester, nylon, 40 C	3,0 kg	22	0,30	35
Wool wash	Wool / Hand wash, IWS, Superwash, 30°C	2,0 kg	54	0,30	40
Hand wash	Wool / Hand wash, IWS Superwash, 30°C	2,0 kg	54	0,30	40
Rinse programme	Cotton, linen	5,0 kg	7-12	0,05	15
Spin	Cotton, linen	5,0 kg	----	0,05	10
Drain	Cotton, linen	5,0 kg	----	----	1

(1) All programmes are set to the highest available spin speed.
(2) The machine can handle a maximum load of 6.0 kg.

Loops on control card for WM33A/WM44A

Control unit Art.no. 8064361

Loops and their function.



Loops	J1	J2	J3	J4	J5
3 Rinses	0	-	-	-	-
5 Rinses	X	-	-	-	-
WM 33A 1000 rpm	-	X	0	X	-
WM 33A 1100 rpm	-	0	0	X	-
WM 33A 1200 rpm	-	X	X	X	
WM 44A 1200 rpm	-	0	0	0	-

0 = Not broken

X = Broken

WASHING MACHINE MOTOR WM 33A/44A (FHP)

Art.no. **80 637 32** (50 Hz)
Resistances:

Pins 2-3	Stator	1,41W
Pins 1-3	Stator	0,57Ω
Pins 4-5	Rotor	1,54 Ω*
Pins 6-7	Tacho	135, Ω

*) 1,54 Ω measured diagonally across collector.
All resistance values are ±8%.

WASHING MACHINE MOTOR WM 33A/44A (FHP)

Art.no. **80 637 33** (60 Hz)
Resistances:

Pins 2-3	Stator	1,05 Ω
Pins 1-3	Stator	0,58 Ω
Pins 4-5	Rotor	1,75 Ω*
Pins 6-7	Tacho	135 Ω

*) 1,75 Ω measured diagonally across collector.
All resistance values are ±8%.

ELEMENT

2000 W

Art.no. **80 617 06**
Resistance: 28,4 Ω

1000 W

Art.no. **80 617 07** (Certain models)
Resistance: 56,7 Ω

THERMISTOR

Art.no. **80 616 63**
Resistance: 65-35 kΩ
Room temperature 20-30 °C

The thermistor for temperature measurement is installed between the motor cradle and the tank.
The thermistor measures and controls the water temperature, which may vary from 0-90 °C.
The element is sisconnected if the thermistor is short- circuited or disconnected from the program control card or programmer.

DRAIN PUMP

50 Hz

Art.no. **80 616 96**
N.B. Ordered under art.no. 88 011 66.
Resistance: 144 Ω
Current: 0,2 A, 23 W loaded

60 Hz

Art no. **80 619 37**
N.B. Ordered under art.no. 88 011 67.
Resistance: 76 Ω
Current: 0,3 A, 28 W loaded
The drain pump is combined with an integrated needle trap, which can be cleaned by the user.
If the drain pump has run for 180 seconds during draining, the program i stopped, reset and an error code appears on the display.

LEVEL SWITCH

Art.no. **80 642 75**
An electromechanical level switch with two levels, see wiring diagram. Controls the water level and starts the drain pump if Over flow is indicated.

Components and measured values

LEVEL SENSOR

Art.no. **80 616 64**
ASKO Level sensor type 1166.
Voltage:
0,5 V output from the sensor at pressure 0 and 0-level is reached during pumping out.
Measurement by control unit.

The level sensor is mounted on the bridge for electrical components and connected to the PCU, see electrical diagram.

RADIO SUPPRESSION FILTER

Art.no. **80 585 58**
Leakage current 230 V/ 50/60 Hz 0,3-0,4 mA

The filter eliminates radio interferences in the machine.

INLET VALVES

3-way inlet valve

Art.no. **80 617 57**
Resistance: 3,7 kΩ ± 0,5 kΩ
Current: 0,02 A, 5 W

Inlet valve for hot water (option)

Art.no. **80 617 29**
Resistance: 3,7 kΩ ± 0,5 kΩ
Current: 0,02 A, 5 W

INDICATING LAMP (WM33A/44A)

Art.no. **80 604 78** USA
Current: 230 V, 60 Hz 1,7 mA

Art.no. **80 070 73** EU
Current: 230 V, 50 Hz 1,7 mA

DOOR LOCK

Art.no. **80 616 79**
Resistance: 122 Ω
Current: ca 2 A
The door lock is mechanical and is controlled by the button for door opening and different safety devices

ROTARY SELECTOR SWITCH WM33A/44A

Art.no. **80 643 62** (Programs)
Art.no. **80 64376** (Temp Speed)

FUSE

Art.no. **80 554 21** 6,3 A (EU)
80 581 40 15 A (US)